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09/804,383	03/13/2001	Kenneth Hinckley	03797.00060	1177

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EXAMINER	
DINH, DUC Q	

ART UNIT	PAPER NUMBER
2629	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/804,383	HINCKLEY ET AL.	
	Examiner	Art Unit	
	DUC Q. DINH	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *9 and 20-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This is responsive to the Response to Restriction Requirement filed on May 15, 2007. Applicant's election without traverse Invention of Group I, claims 1-8 and 10-19 is acknowledged. Claims 9 and 20-31 are withdrawn from consideration. Claims 1-8 and 10-19 are rejected as following.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 7, 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murai et al. (U. S. Patent No. 5,635,958), hereinafter Murai

In reference to claim 1, Murai discloses a computer system, in (Figs. 13-14) including auxiliary control (keyboard having key switch 18 and key top 19), and a method comprising a steps of:

detecting a first physical proximate to or contacting the first auxiliary control (a finger is in contact with or proximity to a key; col. 7, lines 26-27) in which the first auxiliary control maintains in inactive state; and

generating feedback responsive to the step of detecting, the feedback including an indication of plurality of applications (Figs. 14,15) providing an indication of the functionality of

the first auxiliary control, the functionality of the first auxiliary control associated feedback being dependent upon which one of the plurality of applications is active (as shown in Fig. 14, the brightness of a specific icon "translate" changes, col. 7, lines 25-31).

In this embodiment of his invention, Murai does not disclose detecting a physical presence proximate to or contacting an auxiliary control for a predetermined period. However, in the other embodiment of his invention (Figs. 1-2), Murai discloses the display operation associated with a key top is touched or approached by a finger at regular interval (detecting a physical presence proximate to or contacting an auxiliary control for a predetermined period; col. 4, lines 29-32).

It would have been obvious for one of ordinary skill in the art to provide the step of detecting a physical presence proximate to or contacting an auxiliary control for a predetermined period discloses in Figs 1-2 in the embodiment the one embodiment shown in Fig. 13-14, because this would provide a specific time for the system to make the decision so as the keytop is touched or approached by the finger at regular time interval to provide the display feedback. (col. 4, lines 29-32)

In reference to claim 7, Murai discloses a display screen 10 (Fig, 13) and the step of generating includes the step of displaying a first displaying widget on the display screen responsive for the step of detecting. (Fig. 14, the translate icon is brighter).

In reference to claims 16-17, Murai discloses each icon is displayed in correspondence with the physical position in the horizontal and vertical directions of each key. In the process, assume that a finger is in contact with or in proximity to a key. As shown in FIG. 14, the brightness of a specific icon changes, thereby indicating that execution of a corresponding

process is anticipated. That implied when a second physical presence proximate to or contact to any key (second auxiliary control different from first auxiliary control); the brightness of the specific icon is changed (generating other feedback displaying second display widget) responsive to the step of detecting; discontinuing display the first display widget responsive to detecting the second physical presence (dimming the previous brighten icon) [Figs. 14, col. 16-31].

In reference to claim 18, refer to the rejection as applied to claim 1. In addition, Murai discloses in Fig. 17-19, Murai discloses in Fig. 18A while the switch 21 is not depressed, the finger positions in proximity to each keytop 1 are indicated as a bitmap combination of small pot (detecting the first physical presence proximate to a first auxiliary control in which the control is an inactive state and generating feedback indication of the functionality of the keyboard as bit map), with the approach of the finger to the proximity sensor 22 (detecting a second physical presence proximate to a second auxiliary control different from first auxiliary control) set of characters corresponding to the keytops are displayed distinctly on the screen as shown in Fig. 18B (generating other feedback responsive to the step of detecting the second physical, the other feedback indicating functionality associated with the combination of the first auxiliary for the first and the second controls).

In reference to claim 19, Murai discloses the first auxiliary control is a keytop 1, and second auxiliary control is the key switch 20 on the keyboard input device in Fig. 17.

4. Claims 2, 5-6, 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murai in view of Clark et al. (U. S. Patent No. 5,995,101), hereinafter Clark.

In reference to claims 2, 5 and 30 Murai does not disclose the feedback includes acoustic feedback. Clark discloses multilevel tool tip system that include a sound feedback to provide the

information when a user points with a pointing device to an area of an graphical object such as icon (col. 1, lines 44-53 and col. 2, lines 1-5).

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the acoustic (sound) feedback in the system of Murai in view of the teaching of Clark because it would provide users to obtain detailed information about the function associated with a control, such as tool bar or icon (col. 1, lines 64-68).

In reference to claim 6, Murai discloses pointing device 27 acts as mouse (pointing device) in Fig. 19 so that the user can make entry either by way of keyboard or mouse. Accordingly, Murai discloses everything except the step detecting a first period for a pointing device maintain in inactive state. Clark discloses tool tips that provide details information about function associated with icons. The tool tip 50 appears on the computer display 28 when a user places a cursor over an icon 54 in a predetermined period (first period) in which the pointing device maintain an inactive state (col. 1, lines 20-25).

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide detecting the period of the pointing device (the mouse) in inactive state in the system of Murai, in view of the teaching of Clark because it would provide additional control condition for the system to display the tool tips (col. 1, lines 20-21).

In reference to claim 10, Murai discloses the indication of the display operation which provide the guide separately from an information input, disappears when the finger is released (detecting an absence of the physical presence or contacting the control; col. 4, lines 48-50) satisfying the limitation detecting absent of the first physical presence of contacting the first auxiliary control for a second predefined period in which the firs auxiliary control maintains the

inactive state while displaying the first display widget; and discontinuing display of the first display widget, responsive to detecting the absence of the first physical presence for the second predefined period in which the firs auxiliary control maintains the inactive state.

In reference to claim 11, Murai does not disclose the step of discontinuing display the first widget responsive to activation of a second auxiliary control. Clark discloses the subsequent level tool tips (discontinuing display the first widget and provide new information next level tool tip) may be invoked or triggered by activating a keystroke or keystroke combination (activation of a second auxiliary control) satisfying the claimed limitation discontinuing display the first display widget (first level tool tip) responsive to activation of a second auxiliary control (col. 2, lines 64-68, col. 3, lines 1-7).

It would have been obvious for one of ordinary skill in the art at the time of the invention provide the method disclosed by Clark, activating a keystroke to provide subsequent tool tips, in the system of Murai because it would provide the users detailed information about the function associated with a control area. (col. 1, lines 65-67)

In reference to claim 12, Clark discloses one or more selected keystrokes may be used to closed a tool tip (deactivation of the second auxiliary control) either leaving prior level tool tip display (displaying the first display widget) satisfying the claimed limitation (col. 3, lines 1-5).

In reference to claim 13, Murai discloses each icon is displayed in correspondence with the physical position in the horizontal and vertical directions of each key. In the process, assume that a finger is in contact with or in proximity to a key (first auxiliary control). As shown in FIG. 14, the brightness of a specific icon changes, thereby indicating that execution of a

corresponding process is anticipated. A subsequent depression of the key (second auxiliary is the first auxiliary) addresses and executes an actual process (col. 7, lines 25-31).

In reference to claim 14, Clark discloses the step of deactivation the second auxiliary control for display second level of the tool tip (disabling the first display widget; col. 2, lines 64-68), and Murai discloses the step of releasing a finger causes the indication disappeared (the first physical presence breaks contact with the auxiliary control; col. 4, lines 48-50).

In reference to claim 15, refer to the rejection as applied to claim 13.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murai (U. S. Patent No. 5,635,958) in view of Grant (U. S. Patent No. 5,854,624).

In reference to claim 3, Murai does not disclose the computer system has a game controller including the first auxiliary control. Grant discloses a keyboard using as game controller (Fig. 5, col. 6, lines 3-6).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard system of Murai to have the game controller for the computer system in view of the teaching of Grant because it would provide users with significant advantages over the keyboard device (col. 5, lines 9-10).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murai in view of Barber et al. (U. S. Patent No. 5,973,670), hereinafter Barber.

In reference to claim 4, the Murai does not disclose the feedback includes tactile feedback. However, Barber discloses a tactile feedback system for an input device.

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the Barber's tactile controller in the system of Mura for providing additional feedback for the system to detect the cursor is at the boundary of a graphical object for precisely selecting the graphical object. (col. 1, lines 40-44)

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murai in view of Johnson (U. S. Patent No. 6,246,405).

In reference to claim 8, Murai does not disclose the display widget includes a user interface through which a user may change the settings of the functionality of the first auxiliary control. Johnson discloses a widow (display widget) for changing the setting of the hot keys (functionality of the auxiliary control) as claimed.

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the window for setting the hot keys in the system of Murai in view of the teaching of Johnson because it would provide a system that conveniently manages objects on the desktop GUI, particularly when working with a plurality of active applications (col. 2, lines 20-24).

Response to Arguments

8. Applicant's arguments with respect to claims 1-8 and 10-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC Q DINH
Examiner
Art Unit 2629

DQD
August 2, 2007